

ON A SMALL COLLECTION OF LAND-SHELLS FROM CENTRAL AFRICA.

By EDGAR A. SMITH, F.Z.S., etc.

Read July 12th, 1895.

IN 1894 Mr. G. F. Scott Elliot made important botanical collections in the neighbourhood of the Albert Edward Nyanza. He also collected a number of zoological specimens, of which the shells here enumerated form part. Many of the specimens he obtained were from

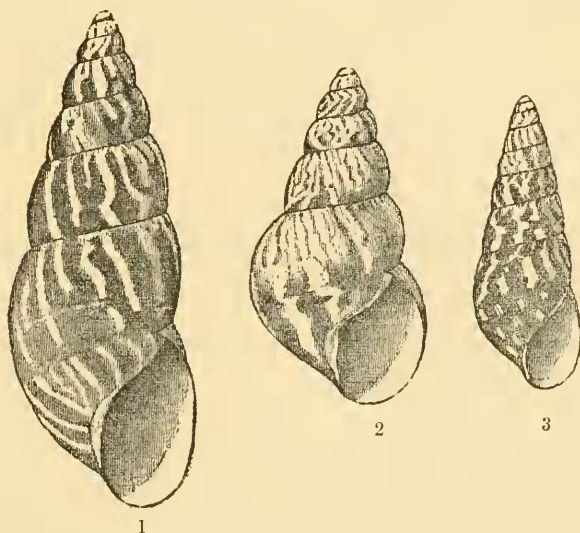


FIG. 1. *Limicolaria saturata*, n.sp.
 ,, 2. *Limicolaria ventricosa*, n.sp.
 ,, 3. *Achatina Ellioti*, n.sp.

considerable altitudes upon Mount Ruwenzori, situated to the north of the lake, and it is possible that some of the shells were collected there. With one exception, they belong to genera already containing allied species. The *Achatina Ellioti*, however, is remarkably distinct from the other forms of the genus, both as regards shape and colour.

1. *BURTOA NILOTICA* (Pfeiffer).

Bulimus niloticus, Pfeiffer.—Proc. Zool. Soc. 1861, p. 24.

Limicolaria nilotica, Pfr.—Novitates, vol. iv, p. 5, pl. cx, figs. 1–3.

Burtoa nilotica.—Bourguignat, Moll. Afrique équator., p. 89 (March, 1889).

Livinhacia nilotica.—Crosse, Journ. de Conch., April 1889, p. 109.

Hab.—Buddu, western shores of the Victoria Nyanza.

This is one of the characteristic species of the Great Lake region of Central Africa, and, ranging over a very wide area, is subject to considerable modification of form. These differences have been noted by the late M. Bourguignat,¹ who, in a manner characteristic of the 'Nouvelle École,' has created several so-called species, which appear to be but very slight variations. Moreover, he considers that the three figures of this species given by Pfeiffer represent three different forms, one of which he names *Burtoa Pethericki*, another he regards as a form of a different genus (*Burtopsis*), and only figure 1 is allowed to represent Pfeiffer's *nilotica*! His genus *Burtopsis*, in my opinion, is also founded on forms of the present species, in which the peristome is somewhat more thickened.

The *Limicolaria Bourguignati* of Grandidier is also probably closely allied. It is described and figured in the Bull. Soc. Mal. France 1885, vol. ii, p. 157, pl. vii, fig. 1; and according to M. Bourguignat's theory of reasoning, the shell figured must belong to a different species, because it does not agree with the description. It is said to be whitish, with red subundulated flammules irregularly scattered, whereas the figure depicts none of these.

2. *LIMICOLARIA VENTRICOSA*, n.sp.

Testa pyramidalis, ad apicem obtusa, imperforata, pallide carnea, strigis nigris vel saturate fascis, plus minus undulatis, picta, lineis incrementi tenuibus striisque paucis spiralibus sculpta; spira ad apicem valde obtusa; anfractus 7, perconvexi, infra suturam obliquam in anfr. duobus ultimis concave et leviter impressi, ultimus brevis, subglobosus; apertura inverse auriformis, lata, intus obscura, longit. totius $\frac{2}{3}$ aequans; peristoma tenue, margine dextro arenato, columellari rectiusculo, reflexo, purpureo. Longit. 44, diam. 22 mm.; apertura 18 longa, 11.5 mm. lata.

Hab.—Albert Edward Nyanza, 3,000–4,000 feet. Remarkable for the convexity of the whorls, the obtuse apex, and colour. The stripes on the upper whorls are rich brown, but upon the body-whorl they become almost black. They are wavy and narrow on the upper half of the whorls, but widen out into broad blotches on the lower part.

3. *LIMICOLARIA SATURATA*, n.sp.

Testa elongata, imperforata, saturate fusca, strigis obliquis, plus minus undulatis, picta; spira elongata, ad apicem pallida, submamillata; anfractus 8 convexi, sutura obliqua sejuncti, lineis incrementi tenuibus obliquis striisque spiralibus levibus plus minus granulato-caucellati; apertura inverse auriformis, intus sordide caeruleo-albida, longit. totius $\frac{1}{3}$ fere aequans; columella subrecta, reflexa, leviter incrassata; labrum arcuatum, tenue. Longit. 67, diam. 25 mm.; apertura 23 longa, 12 mm. lata.

Hab.—Albert Edward Nyanza, at 3,000–4,000 feet.

¹ Moll. Afrique équat., pp. 88–100.

This species is remarkable for the depth of its coloration and the length of the whorls. The lines of growth are slightly puckered beneath the suture, but the granulation of the surface generally is very feeble. Only a single specimen was obtained. The remains of the animal enclosed about twenty ovate, strong, white, calcareous eggs, about 6.5 mm. in length and 5 in width. The remains of a very thin olivaceous epidermis are traceable on the last and penultimate whorls.

4. *ACHATINA ELLIOTI*, n.sp.

Testa elongata, angusta, albida, epidermide decidua, nitente, luteo et nigro strigata, et maculata induta, lineis incrementi tenuibus superne infra suturam tenuiter pliciformibus striata; anfractus 9 leviter convexiusculi, lente acrescentes; spira elongata, ad apicem obtusa; apertura piriformis, cæruleo-albida, longit. totius $\frac{1}{3}$ haud æquans; columella arcuata, inferne truncata; labrum tenuissimum, curvatum. Longit. 38, diam. 13.5 mm.; apertura 12 longa, 7 mm. lata.

Hab.—At the Albert Edward Nyanza, 3,000–4,000 feet.

This species is very distinct from all the known species of *Achatina*. The narrow elongate form and the remarkable shining epidermis, blotched and streaked with black and buff, are the most important features.